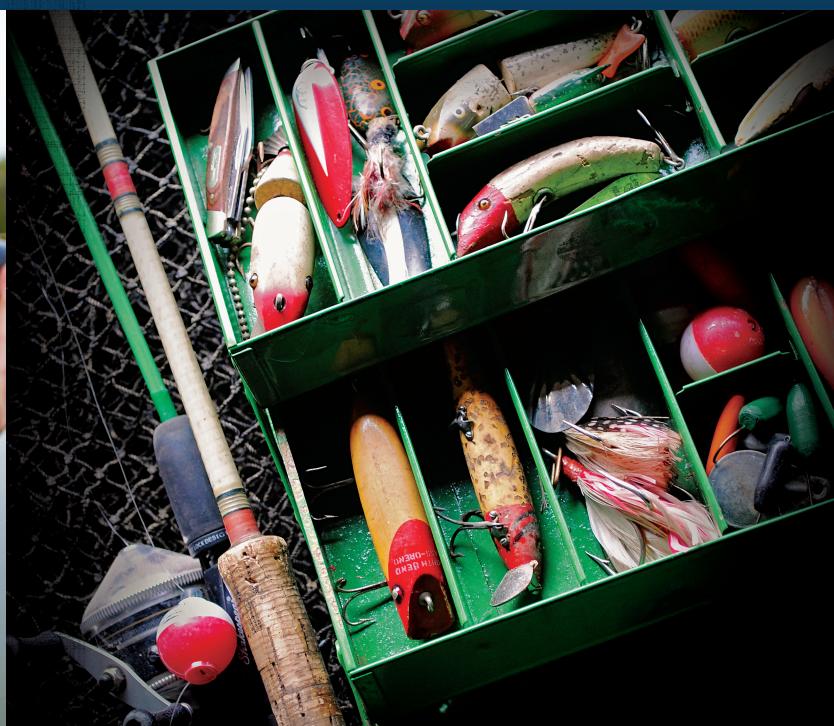


GOING FISHING



In today's fast-paced world, kids are shuttled from dance to piano lessons to basketball practice. Sometimes, all in the same day! Family time around the dinner table has decreased. Job-related stress is impacting Americans every day.

Recent studies have shown the positive health benefits of spending time outdoors. Here in South Dakota, we're lucky to have abundant natural resources to enjoy. Fishing is just one of the many outdoor activities that helps improve the quality of life for those who call South Dakota home, and our visitors.

A recent statewide angler survey revealed the top three reasons people fish in South Dakota:

- 1. To enjoy time in nature
- 2. For relaxation
- 3. To spend time with friends and family

What better way to combat stress than to go fishing with your family and friends?

How do you get started? A stroll down the fishing aisle in the sporting goods section of your local department store can be intimidating. There are dozens of rod and reel options and hundreds of different lures, weights, hooks, minnow buckets, contraptions and gizmos in every color of the rainbow.

A flip through the pages of this guide will show you that you only need the basics – some tackle and an inexpensive rod and reel combo to get started. You'll find tips on equipment, fish identification, knot tying and fish cleaning – everything you need to begin a lifelong passion for fishing.

This fishing guide is designed to show beginning anglers how simple fishing can be and set you on your way to improving your quality of life by getting outdoors.

Get outside and enjoy South Dakota's resources!

John Lott

Aquatics Section Chief South Dakota Game, Fish and Parks



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References:

Oklahoma Department of Wildlife Conservation, Fishing in the Schools Minnesota Department of Natural Resources, MinnAqua Missouri Department of Conservation, Angler Skills Series

COVER PHOTO BY LARRY PAPE BACK COVER PHOTO BY JENNY NGUYEN PHOTO OPPOSITE PAGE BY ERIC FOWLER

CHAPTER 1

GOING FISHING

Fishing is fun — if you allow it to be. With the correct motivation, expectations, equipment and knowledge, a fishing trip can be a rewarding experience. Whether it is with family, friends or as a way to get away by oneself, the memories and health benefits created by time outdoors are invaluable. We encourage you to try your luck at fishing and use this guide as a resource to answer your questions on why, when, what, how and where.



Author Henry David Thoreau observed that "many men go fishing all of their lives without knowing that it is not fish they are after." Consider your own motivation to fish. It can be to catch a meal, to be with friends, to compete for the most or biggest fish, to teach a child a new activity or to get away from the stresses of life and just spend time disconnecting. Defining why you want to fish will give you purpose to actually go fishing.

Look upon every fishing trip as an occasion for hope. There will be some days where the fish will bite on a bare hook, and these will be fantastically memorable. Be prepared for good days by having a camera to capture the memory. Be prepared for the others by having an expectation that there will be good days to come, and have an alternative plan to make the trip fun. Pack a lunch, take along a book, go for a hike, look for frogs, stop by a local restaurant for a fish dinner — use the opportunity of going fishing as a point of departure for any type of fun and you will never be disappointed.

The essentials for fishing are really quite simple. Don't get tangled up in and frustrated by the equipment. A stick and

string or inexpensive rod and reel, a supply of small hooks and weights and a few bobbers are all that is needed.

Even the bait can be simple by using cheap pantry items like corn, lunch meat or bread or collecting your own bait such as worms from the backyard or grasshoppers from shoreline vegetation. Keep it simple and as you gain experience, experiment with advanced techniques and equipment.

To know where, when and exactly how to catch a fish on any given day is the secret to catching fish. The best way to learn is to study and observe. The first thing you will discover is that there are no secrets. Fishermen are

generally more than willing to "give up" what is working, and what works changes from day to day. The most helpful tips are the basic information that can be found in this book.

When in doubt or if you want to learn more, call your local South Dakota Game, Fish and Parks office.

EQUIPMENT

THE REEL, THE ROD AND THE LINE

At the sporting goods store, you will be presented with many options for fishing equipment. There are basic components to each rig that work together to create efficient casting — the rod, reel and line. These can be purchased separately or as pre-assembled combos.

REELS

The fishing reel was developed when early anglers looked for ways to fish deeper and farther than they could with a simple string tied to the end of a pole. The reel was initially designed as a place to store extra fishing line, but as technology developed in the 1800s, reels became casting and retrieving devices, as well. During a cast, line unwinds from a spool and is then rewound onto the spool with the turning of the reel handle. Many reels are also equipped with a drag mechanism that applies variable pressure to the line, which allows you to adjust the resistance the fish feels when it pulls against the line. The ability to adjust the resistance on the line can help an angler to land a fish without the line breaking as the fish tries to swim away. There are four major reel types: fly, bait-casting, spinning and spincasting.



FLY REELS

Fly reels function primarily as storage for unused line and do not aid in casting. These reels are used with long, slender rods designed to cast lightweight, delicate flies using the weight of special fishing line to propel the cast. Fly reels are positioned on the underside of the rod.



BAIT-CASTING REELS

The first casting reels were developed by jewelers and watchmakers, craftsmen trained to make delicate gears with precision tools. Because of their accurate and precise

not a good choice for beginners.



casting ability, bait-casting reels remain popular, even though they require more skill than spinning and spincasting reels. The line on a bait-caster comes straight off a spool that spins freely as the line is cast. With a classic baitcaster, the angler must use a thumb to control the speed of the spool; if it turns at a faster speed than the line as it comes off, the line backlashes and tangles. Bait-casters are positioned on the topside of the rod. Bait-casting reels are

SPINNING REELS

Unlike casting reels, which have a rotating spool, the spool on an open-faced spinning reel is fixed, and a bail wraps the line onto the spool as the handle turns. The concept of a fixed spool evolved from a French

method of wrapping line around a wine bottle and then using a sidearm cast to allow the weight of the bait to pull the line off of the bottle. (You can make a simple caster like this with fishing line affixed to an empty soda can.) Before casting with a spinning reel, the line must be released by flipping the bail to the open position. Because this type of reel creates little friction during casts, it can typically cast farther than a bait-caster. Additionally, spinning reels can handle very light line and rarely backlash. Spinning reels, like fly reels, are positioned on the underside of the rod.



SPIN-CASTING REELS

Spin-cast or close-faced reels are the best choice for novice anglers because they operate with the push of a button and are difficult to tangle. Like spinning reels,

the spool on a spin-caster remains

stationary during the cast and retrieve. As the name suggests, the spool is enclosed in a cover. Instead of using a bail to pick up line, a spin-caster has a pin mechanism that works inside the cover to wrap the line around the spool. The pin is retracted to free the line for casting by pushing a button on the back of the reel. Most spin-cast reels are positioned on the top of the rod.



A fishing rod works as an extension of the angler's arm to propel a hook or lure into water. When the rod bends, the power of the recoil propels the weight on the end of the line (or in the case of a fly rod, the weight of the line itself).

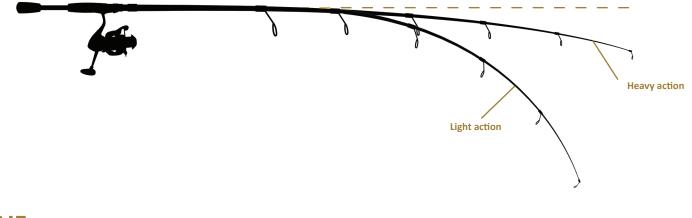
Action describes how much the rod bends when pressure is put on the tip. A fast-action rod is stiffer and will bend only near the tip, whereas a slow-action rod will bend all the way into the lower portion of the rod. Fast-action rods provide better sensitivity to a bite and faster hook-setting capability, but medium-action rods provide more casting distance because the recoil of the rod is greater as it straightens out after a casting motion. Medium-action rods are a good choice for beginning anglers.

Some manufacturers will also refer to the power of a rod. This describes the strength or lifting power of the rod and is related to the weight of the line it can handle and the lure weights it can cast most effectively. For example, an ultra-light rod should be strung with a light line and can be used to cast very light lures. The action and power of the rod is largely determined by its materials. Most rods will be made up of graphite, fiberglass or a combination of these materials.

Line guides, or eyelets, control the line during the cast and distribute the stress on the rod when pressure is applied to the line. The guides on most rods will be graduated, with larger rings near the reel and smaller near the tip.

The graduated sizes help reduce the friction of the line on the guides as it uncoils during the cast. The location of the guides will depend on the reel intended for it. Spinning rods will have guides on the bottom of the rods and casting rods will have guides on the top.

The length of a rod varies and depends largely on the angler's preference, and most rods are made of two pieces that connect together and are between 5 and 6½ feet long. Fly rods are much longer and often break down into several pieces. Most rods will have length, action and recommended line weight imprinted near the base of the handle. **To start with, a 5½-foot rod is a good length.**



LINE

Fishing line is available in a variety of materials, colors and strengths. The breaking strength of fishing line is called test and is measured in pounds. The larger the number, the stronger the line. So, fishing line labeled as 6-pound-test has been tested and proven not to break until at least 6 pounds of pressure are on the line. The knot or the contact point between line and lure is extremely important in getting the most out of your fishing line. Refer to the section on knots later in this guide for tips on knot tying. The pound-test you choose will depend on the capacity of the reel you are using and the type of fish you are hoping to catch. **A good general use line is between 6 and 10-pound-test.**

MONOFILAMENT

Monofilament line, made from nylon, is a good line for novice anglers to start with. It can be used on most reels and is relatively inexpensive. It is available in a variety of colors to reduce visibility in different water conditions. It is also available in a wide range of strengths. Small diameter line will maximize casting distance and minimize visibility. Stronger monofilament will have a thicker diameter, so make sure your reel can handle the pound-test line you select. With monofilament, you typically get what you pay for. The economy choices tend to be lesser quality and strength.

BRAIDED

Braided line, made from Dacron, Kevlar or other synthetic fibers woven together, is generally more expensive than monofilament. Individual strands are woven through an intricate, time-consuming braiding process to produce thin, strong line. Braided lines work well when fishing in areas with a lot of snags or in deep water. These lines tend to be more sensitive because they don't stretch (it's easier to detect a bite on the line), but are not as versatile and require different knots.

Line used on fly rods is very different than line used on spinning or casting rods, and the weight rather than strength of the line is the most important consideration when choosing line to match the rod.

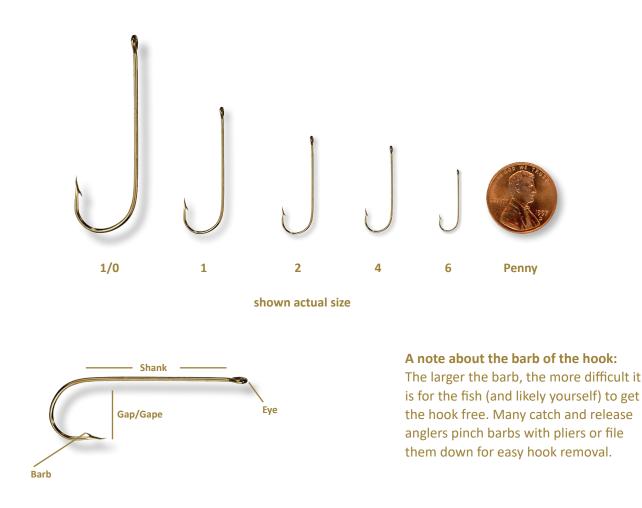


BASIC TACKLE: HOOKS, WEIGHTS, BOBBERS, AND BAITS

Tackle choices can be overwhelming. Rows and rows of flashy lures and hooks in dozens of sizes and shapes can discourage even the savviest shoppers if they're not familiar with the terminology. This section will prepare you for a shopping trip to the sporting goods store.

HOOKS

Most new anglers will start out fishing with live bait, such as earthworms, and many experienced anglers will use live bait, such as minnows, or prepared bait, such as doughballs, to target fish. A good selection of hooks that will hold a variety of baits is an important component of a tackle box. Hook size is indicated by a number (2, 4, 6, 8 ...), and larger numbers indicate smaller hooks. Very large hooks are sized differently (1/0, 2/0, 3/0 ..., read one aught, two aught, three aught), and with this designation, larger numbers indicate larger hooks. **Use smaller hooks (size 6-10) when fishing for small species like bluegill and crappie.** Larger hooks can be used to fish for larger species such as walleye and pike. Treble hooks have three points, and are often used with prepared baits such as doughballs or marshmallows. Hooks also come in different shapes. Many have straight shanks, but some are bent to help hold bait, or prevent fish from swallowing the hook.



A well-outfitted tackle box will include a variety of the following hook types:

BAITHOLDERS

Baitholders are one of the most popular styles hooks. The additional barbs on the shank hold bait like night crawlers and leeches more effectively.

WORM

Worm hooks are used to fish soft-plastic baits. Worm hooks feature a slight bend just below the hook eye and a wide gap; these features help hold the bait secure and help set the hook. The unique shape of worm hooks allow the soft-plastic bait to be rigged so that the hook will be less likely to snag in aquatic vegetation.

ABERDEENS

Aberdeens are a light wire, long shank hook, perfect for bluegill and crappie. The long shank allows for easy removal of the hook from panfish that tend to swallow bait, and are good hooks for teaching kids to fish.

TREBLES

Treble hooks are a single eye with three hooks fused together. Treble hooks are often used on lures and are also good for holding prepared baits.



WEEDLESS

Weedless hooks feature plastic or wire guards that stand out in front of the hook point. They help prevent the hook from snagging.

The name is misleading as they are not foolproof against getting hung up in aquatic vegetation, but are better than a bare hook for fishing in areas with woody snags.

CIRCLE

Circle hooks have a pronounced circular bend, short shank and an inward bending point. The shape of the hook discourages it from becoming hooked in a fish's gut when the bait is swallowed. When an angler detects a bite, a slow steady pull of the line is all that's needed to rotate the hook into the fish's mouth to prevent gut-hooking.

WEIGHTS

Often the weight of the hook and bait alone is not heavy enough to cast the line or hold the bait underwater. Sinkers are pieces of metal that provide extra weight. It is good to have a variety of sinker types and sizes in your tackle box.

SPLIT SHOT

Split shot are small, round sinkers with an opening in the center and usually with wings on the back. They can be crimped on your line with pliers and removed from your line using pliers to pinch the wings together.



BELL SINKERS

Bell sinkers are molded around a shaft with an eye, and fishing line can be threaded through or tied directly to the eye. These

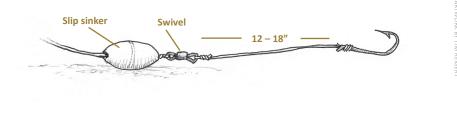


sinkers cast well in the wind and are good for shore fishing. The rounded shape of the sinkers also reduces the chance of snagging.

SLIP SINKERS

Slip sinkers are threaded onto the line and can slide up and down on the line. They can be round, bullet-shaped or egg-shaped. Slip sinkers allow the line to slide through the sinker when a fish takes the bait, so it does not feel unnatural pressure from the sinker. This makes it more likely for the fish to keep and swim off with the bait, allowing anglers time to set the hook. Slip sinkers are often held on the line at a distance from the hook using a split shot or barrel swivel.





BOBBERS

Bobbers help keep bait suspended off the bottom and also provide an indication of when a fish takes your bait. The position of the float on the line can be adjusted to put your bait at a specific depth below the surface.

CLIP-ON BOBBERS

Clip-on bobbers are usually round and have a button on one side that extends a hook to the opposite side where the line can be attached. The button can also be depressed exposing a second hook to secure the line to. Clip-on bobbers are attached to

line in a fixed position and the hook and weight dangle freely below the bobber. **Clip-on bobbers need be no larger than 1 inch in diameter and are a good choice for new anglers.**

SLIP BOBBERS

Slip bobbers are designed to slide along the line, allowing the angler more options for setting the depth of the bait. Because the line can slide through the bobber, the hook will continue to sink when cast until the line hits the bobber stop. With fixed bobbers, the hook can only sink as deep as the length of the line between it and the bobber. Slip bobbers should be used with a bobber stop (a round bead that goes above the float and a stop knot which is positioned above the bead) to limit the movement up the line and a split shot (at a distance above the hook) to prevent the bobber from sliding all the way to the hook.

SPLIT SHOT

HOOK

BEAD

STEN

BOBBER

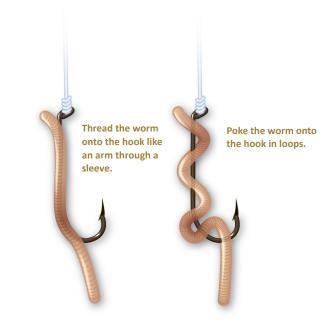
STO

BAITS

The purpose of the bait is to attract the fish to your hook using movement, vibration, color and/or scent.

LIVE BAITS

Live bait is an option for many sport fish species. This category includes earthworms, minnows, crayfish, tadpoles, grasshoppers, etc. Earthworms are an excellent choice for new anglers and will attract a wide variety of fish, including bluegill, catfish, crappie and largemouth bass. A limited number of water bodies have regulations against using live bait. Refer to the South Dakota Fishing Handbook for information on bait restrictions.



ARTIFICIAL BAITS (LURES)

Lures are designed to resemble and move like prey, and will often mimic fish or aquatic animals. Even if they don't look like fish or critters to our eyes, their color patterns, reflections and movements in the water are designed to mimic living things. Lures in natural colors that resemble prey, like silver and white, are useful for clear-water conditions. In murky water, brightly-colored lures can be a good choice. Some baits are designed to attract fish with scents and tastes and are effective when targeting fish that don't feed by sight. The rigging and design of different lures determine how they move in the water, and at what depths. Movement and depth of the lures can also be manipulated by the angler. Modern fishing lures were first manufactured commercially in the United States in the early 1900s by the firm of Heddon & Pflueger in Michigan. These were designed from lures handcrafted from old kitchen spoons or whittled from pieces of wood.

SPINNERS

Spinners are a great beginner lure because they are easy to use and will attract many sport fish. Small spinners can be used for crappie and bluegill. They are essentially a metal shaft with spinning blade. Often the shaft is decorated. The hook can be bare or dressed with hairs or feathers. Dragging a spinner through water causes the blade to spin and the spinning motion of the blade creates sounds and vibrations that attract fish. This

makes spinners an excellent choice for murky water.

How to fish with spinners: Fishing with a spinner is simple; just cast and retrieve, testing different speeds while retrieving to find the action that gets a bite. When rigging a spinner, always use a ball bearing swivel to prevent the line from twisting.

SPOONS

Spoons are among the most widely used of all fishing lures and will attract many species. They are effective, versatile lures and easy to use. The spoon shape of the lure causes it to rock back and forth like an injured fish as it is retrieved.

Casting spoons (e.g., Daredevle) are ovalshaped and have cupped bodies. Their thickness and weight dictate where and how they should be used. Thin, light spoons sink slowly, so they are better for fishing in shallow water, over the top of submerged weeds, brushpiles or in cold water. Thick, heavy spoons sink faster and are better in deeper water or swift current. Casting spoons should be attached with a swivel to allow freedom of movement and keep line twist to a minimum.

Topwater spoons, also called "weedless spoons" (e.g.,

Johnson's Silver Minnow), are for casting and retrieving in aquatic vegetation. When reeled rapidly, these



lures rise to the surface and skim over vegetation without snagging. Most feature a single hook welded to the body so it retrieves with the point turned up and away from

snags; the hook is also shielded by a weed guard.



Jigging spoons (e.g., Fergie Special) are designed to fish deep areas for bottom-dwelling fish. They are thick, flat and heavy.

How to fish with spoons: Cast and

retrieve. At the right speed, a spoon will twist onto one side and then twist the opposite direction. If it rolls completely over and spins through the water, the retrieve is too fast. Jigging spoons are typically dropped over the side of a boat and jigged vertically below.

JIGS

Jigs are excellent lures for many sport fish species. Small jigs can be used for bluegill and crappie, and larger jigs can be used for bass fishing.

A jig comprises two parts: a weighted hook and a jig body. Jig hooks are made using a mold, which shapes metal to form the jig's head and collar. Most jig heads are made from lead, which gives the lure its weight. Round heads are one of the most popular jig styles, but heads can also be fish-head shaped, coned-shaped or oval. A symmetrical head allows it to cut through the water quickly and sink fast. The jig head will usually have a collar with a small point to keep the jig bodies from sliding down the hook.



There is a wide array of bodies for jigs. The most common are made out of rubber or silicone, but are also often made with marabou feathers, bucktail hairs, threads, yarns – you name it. These come in many shapes and can resemble a grub, frog, fish, lizard or insects. The colors of these can range widely.

Twister-tail grubs are a common jig

and body combination with

a ball-head jig. This jig can be used to lure just about any sport fish. The curled tail



undulates and emits vibrations when the jig is retrieved off the bottom and resembles a baitfish.

Tube jigs are soft-plastic hollow bodies with tentacles at the hookend. On a slack line these baits slowly spiral in a tight circle.



When stationary, the tentacles will wave in the water current and when twitched they will pulsate.

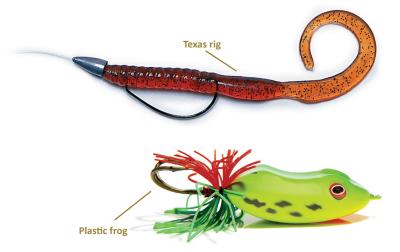
Flipping jigs (or bass jigs) work well for catching bass. The body is a skirt of rubber strands or bucktail that

quiver as the jig descends and pulsate when the lure is jigged. These often come with thick plastic bristles called weed guards that help to prevent the hook from getting tangled in underwater vegetation. These jigs will sometimes have rattles in them.



SOFT PLASTIC BAITS

Plastics include a wide variety of different lures, and can be used to target many sport fish. Plastics are popular with anglers because they feel more natural in a fish's mouth than a hard plastic lure like a crankbait. Hard plastics require that the fish is hooked quickly before it drops the lure, but soft plastics can allow for more time to set the hook. The classic soft plastic bait is the worm. These baits are created by pouring liquid plastic into a mold and adding dyes, metallic flakes, or even scent. They can resemble worms, crayfish, lizards or frogs. The legs, tails, etc. undulate as they move through the water. The soft plastic bodies of these lures encourage fish to hold on to them a little longer before they spit them out, giving the angler a better chance to set the hook.



How to fish with plastics: For the worm, a popular technique is the Texas Rig. Use a bullet weight above the hook, and insert the hook through the top of the worm's head, then bury the point into the body of the worm to make it "weedless" (so it will not get hung up on underwater vegetation.) Cast and let it fall to the bottom. Twitch the rod tip a few times and retrieve in short twitchy hops. A fish bite is detected when a fish picks up the bait and swims away and is noticeable through line movement or a gentle pull. Allow the fish a few seconds before firmly setting the hook.

PREPARED BAITS

Doughbaits are often used to attract catfish. Many catfish anglers have closely guarded secret recipes for doughbaits that combine a variety of tastes and scents. Livers, hot dogs, frozen shrimp, cut pieces of fish, and other food items that will disperse a scent in the water are all good catfish attractants.



Canned corn can be a very effective bluegill bait. Treble hooks are often used to hold prepared baits.

THE TACKLE BOX

Hard-sided tackle boxes are not as common as they once were. Most tackle "box" choices are now more like bags that hold a variety of boxes designed to carry all types of lures and equipment. These small component boxes are a great choice for new anglers to start and build a collection. As you develop more specific fishing interests, you can expand to larger, more complex containers and bigger tackle bags. Your boxes should have enough trays to organize your lures so they can be stored separately and won't tangle together. Plan to buy a tackle bag that is slightly larger than what you need right now. A little extra space allows you to carry non-tackle items (like your cell phone and sunscreen) and gives you room to expand your collection.

FILLING YOUR TACKLE BOX

In addition to a variety of hooks, weights, bobbers and baits, consider the following for your tackle box.

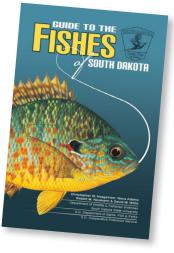
South Dakota Fishing Handbook:

Your current South Dakota Fishing Handbook will inform you of the fishing regulations. Length limits, daily limits and possession limits are imposed to help manage the fisheries in South Dakota's waters.

Guide to the Fishes of South Dakota book: Be able to

identify the fish you catch so you won't accidentally break a law by putting a "catch and release" species on your stringer.

Fishing permit: At 16 years old, you are required to purchase a fishing permit if you are going to fish in South Dakota. Revenue from fishing permit sales allows the South Dakota Game, Fish and Parks to



maintain quality fisheries for South Dakota's residents and visitors to enjoy. It's handy to keep your license in your tackle box, safe inside a waterproof sleeve.

Knot-tying card: Until you've tied on many hooks, it may be difficult to remember the steps to a good fishing knot. A reminder card will help you tie a secure knot so you don't lose your fish.

Swivels: Some lures, like spoons and spinners, can cause the line to twist when they are retrieved. Attaching a

swivel to the line and the lure to the swivel will prevent line twisting. Swivels can also be used as a stop for slip sinkers or bobbers. Some swivels are



or bobbers. Some swivels are equipped with snaps to make it easy to change lures.

Needle-nose pliers: This is

a useful tool in attaching and removing split shot and also in removing a hook from a fish's mouth.



Nail clippers: These are handy for cutting excess fishing line after tying a knot.

First aid: Disinfectant, a few Band-Aids and antibiotic ointment in a Ziplock bag are good to have on hand when dealing with sharp objects (hooks and fish spines).

Tape measure: Keep a tape measure so you can measure your catch. Not only will you be able to brag about the size of your catch, it is also important to determine whether a fish you intend to keep meets length-specific regulations.

Whistle: A whistle can be heard from greater distances than a person's cry for help. A repetition of three short blasts followed by a pause is the international signal for distress.

Sunscreen and insect repellent: Pick up travel-sized bottles to stash in the bottom of your tackle box.

Stringer: A stringer is useful if you want to keep the

fish you've caught while you continue fishing. The stringer can be threaded through the fish's mouth and secured on the shore, allowing the fish to stay alive in the water until you are done fishing.

Landing net: Although a landing net probably won't fit in your tackle box, it is a useful item to add to your gear collection. Choose a net with a long handle for shore fishing. A net with a collapsible handle will store easily. Rubber mesh nets are durable and hooks or spines will not get tangled in rubber mesh like they will in nylon mesh.



KNOT TYING AND CASTING

THE ART OF CASTING AND KNOT TYING

The prime objective of going fishing is to catch fish, and the tool we use is a fishing rod and reel with a string attached to connect us to those fish. Casting accurately to put the bait where the fish are, and rigging with a solid knot to ensure you can retrieve fish once they take the bait are important skills that connect "going fishing" with "catching fish." The nice thing about fishing is that you get to practice these skills while doing it.

KNOTS

Tying a good knot is arguably the most important skill the angler can learn. The knot is the weakest part of the line and if poorly tied, could result in a lost lure or fish. A bad knot will either pull loose when pressure is put on it or cinch down tight and sever the line. There are many knots that an angler could use, but only a few that you should definitely know how to tie.

THE IMPROVED CLINCH KNOT

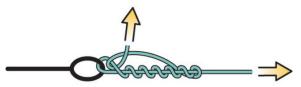
This is the most commonly taught fishing knot and can be used on monofilament line to attach a lure or swivel. The knot is simple to remember and the line retains nearly all of its strength.

1. Thread the loose end of the line through the eye of the hook, pulling through plenty of line to make your knot.

2. Wrap the line around itself, creating 5 to 7 twists. Too few twists in the line will result in a knot that pulls out. Too many twists in the line will weaken the line. Holding the loose end secure against the line and turning the hook with the other hand is an easy way to create twists in the line.

3. Holding on to the twisted line, thread the loose end of the line through the loop near the eye of the hook.

5. Hold the loose end against the hook with one hand and with the other hand, gently pull the line away from the hook to tighten the knot against the eye of the hook. Wetting the line with your mouth before tightening it will help the line cinch down and will reduce friction that could weaken the line.



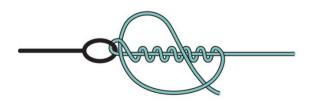
6. Neaten the knot so that the coils are stacked up tightly behind the eye of the hook.

7. Trim any excess line from the loose end to about onequarter inch.





line. Run the loose end of the line through the new loop.



THE PALOMAR KNOT

This is another simple and versatile knot that retains nearly all of the line strength after it is tied. The Palomar knot should be used when fishing with braided line. An improved clinch knot will pull loose on braided line.

1. Thread the loose end of the line through the eye of the hook, pulling through plenty of line.

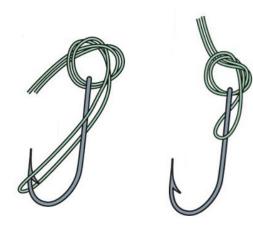
2. Thread the loose end back through the eye of the hook, creating a large loop that passes through the eye of the hook.



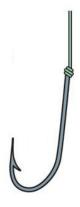
3. Holding the loose end against the line with a thumb and forefinger, use the other hand to tie a simple overhand knot with the loop. Do not tighten the line.



4. Place the hook or lure through the loop.



5. Pull the link gently to tighten the knot down against the eye of the hook.

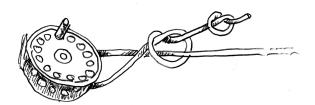


A note about line and knots: There are debates about what is the strongest fishing knot. There are hundreds to choose from. But the important considerations are: what is the best and simplest knot for the situation? And, is the knot tied correctly? A few suggestions: Learn the basic knots presented here and practice tying them. Test the knot (pull on it) before using the rig. Use a little moisture (saliva works well) to lubricate the knot as it's pulled tight. Occasionally check and retie the knots.

ARTWORK BY MINNESOT.

THE ARBOR KNOT

Use this knot to attach fishing line to a reel.

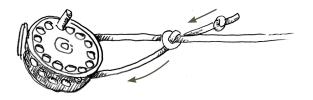


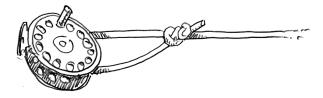
1. Tie an overhand knot near the end of the line.

2. Tighten the knot and trim off excess.

3. Run the line around the spool.

4. With the loose end of the line, tie a second overhand knot around the line attached to the spool.







5. Pull the knot tight while working the first knot close to it.

ARTWORK BY TIM REIGERT

Practice knot-tying skills with a rope before advancing to fishing line. An eyebolt works as a giant eye of the hook to thread a rope through. Better yet, thread your rope through the handle of a drawer.

Tip: When line tangles during a cast, small loop knots can remain in the line. These knots are referred to by anglers as "wind knots" and will significantly weaken the line strength. When pressure is applied to the line, it will snap at the knot. Always check your line for wind knots before fishing.

THE SURGEON'S KNOT

The Surgeon's Knot is used when you are connecting two pieces of fishing line such as a braided line to a leader. It is the ideal choice when joining two lines with varying thickness or diameter.

1. Lay the lines on top of one another overlapping each other by about several inches.



2. Tie an overhand knot to create a simple loop for the lines to work as one.



3. Carefully pass both the tag end and the entire leader through the created loop about 2 times.



4. Add moisture to the knot and slowly pull all 4 ends tight.



CASTING

When fishing from shore, you will likely fish in water with aquatic vegetation, rocks and structures like flooded trees or boat docks that provide cover. The areas that provide cover are where you will find fish. The ability to target where the fish are and cast your bait to that spot without getting hung up is a skill that will greatly increase your fishing success.

Many people when first practicing a cast will confuse distance with accuracy. The goal of a good cast is not simply to toss the bait as far into the water as you can, but to judge the distance of your target and then cast that exact distance. In fact, casting long distance is not a skill you should need when fishing from shore. Most fish will be near shore taking advantage of the cover and food available in shallow water.

As with any skill, practice will make you proficient in your casting

abilities. A good way to practice casting is to tie on a practice plug and find an open space in your yard or at a park. Set out some targets – a Hula-Hoop or a bucket makes a good target. Start close to your target, and as you master your casting at close range, increase the distance between you and your target.



OVERHEAD CAST AND RETRIEVE with a spin-casting (closed face) reel

Described for a right-handed angler. For left-handed casting, simply replace the word "right" with "left" in the following instructions.



1. Stand with your feet shoulder width apart and your right foot slightly forward and aligned with the target.

2. Hold the grip of the rod in your right hand with reel and line guides facing up. Place your thumb on the button of

the reel. If the reel and line are held underneath, the line will hit the rod when casting and reduce the accuracy and distance of our cast.



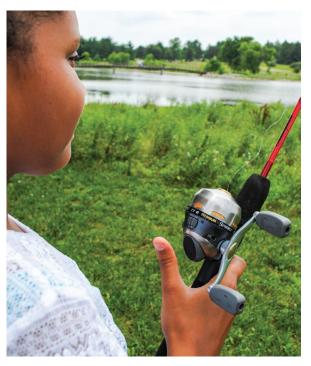
CASTING SAFTEY

Knowing how to cast accurately is essential to casting safely. You want to be in control of where your hook will land! Always aim your cast into the water and never towards another person. Remember that a sharp hook can be dangerous to yourself and others if it is out of your control. Before you cast, always take in your surroundings. Make sure no one is on the water in the vicinity of your target. Look to your sides; look behind you and above before you make a cast. If you get hung up in a tree above head or in a snag on the water, alert anyone near you so they can move away before you pull your snag free. To pull your snag free, hold your rod away from your body and pull on the handle instead of the line. Be prepared to protect yourself from a freed lure or hook flying toward you.



3. Point the tip of your rod at your target.





5. Move your wrist to bring the rod tip forward in line with the target and lift your thumb from the button, allowing the line to release from the spool. The timing of the release is important. If the line is released too soon, your casting plug will fly vertically resulting in a high, arcing cast that doesn't cover much distance and can be caught by the wind and moved off course. If the line is released too late, the plug will hit the ground near your feet. If the line is released at the right time, it will sail straight toward your target.

Tip: Before making your forward cast, look at your lure or hook to make sure it isn't wrapped around the line. Before you cast forward, return your focus to your target. If you are not looking at your target, your cast is likely to go astray.

6. Once the cast is complete, turn the reel handle once in the direction of the rod tip to engage the line so it won't continue to unwind from the spool. You should hear a click as the pin pops back into place.



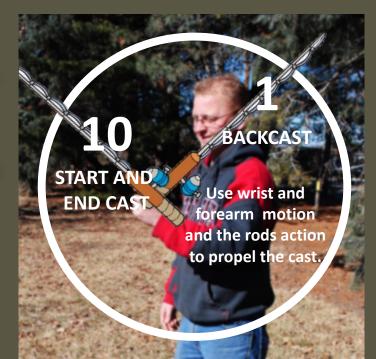


7. As you retrieve the line, turn the handle steadily and keep the rod tip pointed up. It can be helpful to gently pinch line in front of the reel as you retrieve to prevent debris from getting into the reel and to keep an even pressure on the line as it spools. Keeping the line clean and evenly spooled will ensure smooth casts.

THINK OF A CLOCK

Most of your movement should be in the wrist and forearm. Think of yourself standing in front of a giant clock, facing the number 10 with the 12 directly overhead. Start with your rod tip at the 10 o'clock position. When you back cast, bring your forearm to 12 o'clock and then tilt the wrist to bring the rod tip to 1 o'clock. Cast forward by returning your rod to 10 o'clock. Avoid bending the wrist so that the rod falls out of the plane of the cast.

The physics of the rod's movement make this an effective cast. As you bring the rod tip up, the rod will bend back. As you bring the rod tip forward to complete the cast, the rod will straighten out and then bend forward. The action in the rod as it bends and straightens propels your plug forward. It is not necessary to throw your cast like you would a



baseball; in fact, putting a lot of muscle into your cast will often send it astray.

LOCATE, ATTRACT, AND CATCH

No matter where you are located in the state, a lake or stream with fish is close by. Take some time to explore and experiment. Find a fishing spot that is comfortable for you and seems "fishy." Try different baits and techniques. If it's not working out, move. When in doubt, observe or ask other anglers about what is working. Most anglers will oblige.

LOCATING FISH

Think food, oxygen and shelter. Where are these basic needs met for the fish species you target? During mornings and evenings, many fish move out of their daytime shelter and into near-shore areas in search of food. This is often a prime time to have a hook in the water. Fish with high oxygen requirements probably won't be found in a shallow, muddy pond. Instead, look for clean, fresh or flowing water habitat with plenty of oxygen. Shelter provides shade, a place to hide from predators or to lie in wait for prey. Look for weed beds, submerged trees, rocky areas, boat docks, overhanging trees or outcroppings, or even simply deeper pools of water. On bright sunny days, avoid shallow, open water and fish in areas that provide shade.

ATTRACTING FISH

Sight

Fish can see color. When fishing in clear water, use lures that mimic natural colors (like silver and whites). When fishing in murky or deep waters where light doesn't penetrate as well, bright reflective colors (like red, green or chartreuse) are often more effective.

Smells

Fish found in murky or dark water will rely on senses other than sight to find food. Many soft plastics are injected with scents and, of course, live baits will often get a fish's attention when fishing murky waters. Catfishers will often use stink baits or chunks of dead fish called cut bait. While the fish may bite on the smelly stuff, they'll also bite on a chunk of hot dog. There are even commercial products available to spray onto lures as a fish attractant.

Sound

Fish hear differently than humans. Hearing is more like feeling to a fish because they pick up the vibrations of sound in the water with sensory organs like the lateral line. Unnatural sounds will spook fish, so try to be somewhat quiet while fishing. Lures that make noise are popular for deep-water fishing or when fishing in the dark, situations where fish rely on senses other than sight to find food. Fish like Smallmouth Bass will often swim great distances to come up and hit a noisey top water bait.

Pay attention to what your fish are biting on and when. Keep a journal and record the type and color of your lure, the time of year and the weather conditions. Your records will likely begin to show patterns that you can refer back to when choosing baits in the future. For example, you may notice that certain species at a specific lake prefer a specific colored jig at a specific time of year. These preferences likely correlate to something that repeats itself in the environment, like an annual hatch of baitfish that resembles the lure you use.

TECHNIQUES

You can use two primary techniques when fishing from shore – still fishing and retrieving.

STILL FISHING

This technique involves casting the bait and waiting for the fish to bite.

Bobber fishing: Attach a bobber that isn't so big the fish you target can't pull it under the water. Attach the bobber on the line so that the bait will hang suspended at a depth where you suspect fish are. A good place to start is to place the bobber about 18 inches from the hook. If you are fishing deeper water, you may need to adjust the placement of the bobber on the line to allow it to sink to where the fish are. Attach a split shot about 6 inches from the hook, making sure to use a weight that is heavy enough to sink the bait, but not so heavy that it drags your bobber down. When bobber fishing, remember to engage the line by turning the reel handle after you cast.

Bottom fishing: When fishing the bottom, remove your bobber. Before tying on a hook, pass your line through a sliding sinker and then attach a split shot about 12–16 inches from the hook to keep the sliding sinker away from the hook. To detect a bite, make sure there is not a lot of slack in your line, and keep a finger on the line against the rod to feel the vibration of the fish hitting your bait. Another option for bottom fishing is to add a bait like a marshmallow or Powerbait to your hook that will float the hook while the weight remains on the bottom.

RETRIEVING

This technique involves casting out the bait and then retrieving the line after the cast, pulling the bait through the water either near the surface, across the bottom or up and down in the water column. There are many variations on the retrieve that depend largely on the type of lure you are using and the response of the target species.





OTHER METHODS OF FISHING

Now that you have learned the basics of fishing you might want to consider trying some other methods of fishing:

Fly fishing: Basic flyfishing equipment includes a fly rod, reel, and fly line. Instead of baits or lures, fly-anglers use flies. Fly rods are specially designed to cast light flies that are too light to cast with spinning gear. Fly rods are longer and more flexible than spinning rods and



must bend enough to fling the line forward.

They use special line that is weighted and propels the fly forward during the cast. A piece of clear monofilament line called a leader connect the fly line to the fly. Fly fishing is a very popular method for catching trout but fly-fishing gear can be used to catch nearly any fish that swims in South Dakota waters!

Bowfishing: Bowfishing is a cross between fishing and hunting. Bowfishing requires a bow with a special fishing arrow attached to a reel. The basic principle is quite simple. You spot a fish lurking in the shallows, carefully move in closer, draw back your specially equipped bow and arrow, take aim, then let it fly. If your aim is true and your barb-tipped arrow hits the mark, you reel your fish in by the line attached to your arrow. Rivers, lakes, flooded fields, and marshes provide a variety of shallow habitats accessible from shore, by wading, or by boat. Bowfishing takes practice as refraction makes the fish look farther away. Always remember to "aim low" and you just might hit your mark.

Ice fishing: Winter is the time to try ice fishing! Ice fishing equipment includes a sled to haul equipment, shorter rods, ice auger, skimmer, and a seat to sit on (a five-gallon bucket works great!). Popular lures are ice flies, teardrop lures with live bait, or jigs. Please remember to practice ice safety when ice fishing:

- » Less than four inches stay off!
- » Four to six inches ice should be safe for walking
- » Six to 12 inches snowmobiles and ATV's can travel.

SKILLS TO PRACTICE

Setting the hook

This action ensures that the fish is secured to your hook. To set the hook when you feel a bite, you need to have the rod and line prepared. The rod tip should be pointed on the same trajectory of the fishing line and there should not be any slack on the line. Set the hook by sharply pulling the rod up so the tip is pointed away from the water. The action should be sharp and fast, but not so extreme that you send the fish flying out of the water over your head.

Playing the fish

Once the fish is on your hook, you need to get it to shore. You may want to loosen the drag on the line so that a strong, fast movement by the fish won't break your line.

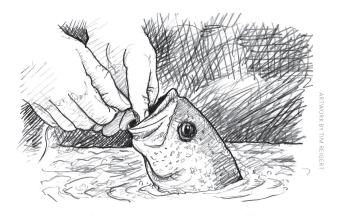
Keep the rod tip up and keep the line tight. Reel in slowly to avoid breaking the line, and keep the fish from heading towards rocks or logs that could tangle your line. The key is to take your time bringing the fish to shore and keep the slack out of the line, so the hook stays secured in the fish's mouth.

Landing a fish

This stage in the process is often where the fish breaks free. Make sure you are prepared to bring the fish to shore. A landing net can make this task easy. Avoid lifting your rod to bring the fish out of the water and onto the bank. This can damage the rod and increase the likelihood that your fish will escape the hook. Instead, reel the fish in near to the shore and then approach your fish with your net or grasp the fish with wet or gloved hands and lift it from the water. Make sure the fish is secured in your hands as you disengage the hook by backing it out in the direction it went in to the fish's flesh.

Releasing fish

The best way to release a fish without causing damage to it is to release it in the water. Try to handle the fish minimally. The more a fish is handled, the more its protective slime coat is compromised. Without that slime, fish are exposed to disease and parasites that may eventually kill them.



If a hook has been swallowed by a fish, it is usually best to cut the line, leaving the hook lodged in the fish's gills or gut. Sometimes a deep hook can be dislodged using needle-nosed pliers, but if it does not come free without tugging, this method should be abandoned. Tugging on the hook to free it will only tear up the fish's internal organs. Remarkably, many fish can extrude foreign objects like hooks from their bodies given sufficient recovery time, so a fish is much more likely to survive if the hook is simply freed from your line and left inside the fish.

If you would like to photograph your fish prior to releasing it, keep the fish in the water until just before you shoot the picture and then return the fish to the water. Remember that fish will suffocate without water flow past their gills.

Be careful not to play your fish so long during the retrieve that you have completely exhausted it by the time it is set free. It may be unable to swim away.

Avoid making any contact with a fish's gills if you plan to release it. They are very vital but delicate organs and easily damaged.

KNOW YOUR FISH

South Dakota is home to more than 100 fish species. Many of these species will never be encountered on a fishing hook because their size, habits, or habitats make them unavailable or undesirable to anglers. Most fish that can be caught by hook-and-line are designated as sport fish species. South Dakota offers excellent fishing opportunities for nearly 40 sport fish, ranging from bluegill to walleye. This section covers a variety of species that are commonly caught when fishing from shore and are good targets for new anglers. For a more complete representation of South Dakota fish species, request a copy of the Guide to the Fishes of South Dakota.



BLUEGILL

Scientific name: Lepomis macrochirus

From the Greek, *lepomis* means "scaled gill cover" and *macrochirus* means "large hand," in reference to its body shape and size.

See Chapter 6 – Fish Anatomy for definitions of body parts.

Average size: 6-9 inches, but rarely more than 8 inches in most South Dakota's reservoirs. A 10-inch (or 1 pound) bluegill is considered a "trophy" catch with the state record bluegill weighing 3 pounds, 4 ounces. (The world record is 4 pounds, 12 ounces from a lake in Alabama.)

Habitat: Warm-water species that prefers clear water. A bluegill's primary diet is aquatic insects that are often found in submerged vegetation. Therefore, clear water that can support plant life is important to this species. Submerged vegetation also provides cover for bluegills to hide from predators.

Diet: Aquatic insects and aquatic nymphs of terrestrial insects (example: caddisfly, dragonfly, mayfly, damselfly); also will prey on small fish, crayfish, snails.

Activity: During daylight, sunfish are fairly sedentary and spend much of their time hovering quietly near submerged cover or in the shade of a tree or structure. At mid-day they are found in deeper water or in shade of overhanging trees or under docks.

Identifying characteristics:

- » Deep bodied (body depth is less than three times the length of the body).
- » Small mouth (mouth does not extend back to the eye).
- » Dark spot near the base of the soft dorsal fin. Dark spot on the ear flap of the operculum.
- » Typically has vertical bars on sides of body.
- » Olive-green with emerald and brassy reflections.